

## ABSTRACT

Method of communication between a mobile station and a base station in a mobile communication system of IMT-2000 communication network basis, which is suitable for effective transmission of various multimedia information within a given channel capacity, the method including the steps of (1) when a mobile station receives a data transmission request, providing one portion of a period of a data frame with regular number and arrangement of down link slots and up link slots and the other portion of the data frame with irregular number and arrangement of down link slots or/and up link slots depending on characteristics and amount of subscriber data to be transmitted, (2) determining a transmission type according to which a communication is executed using a competition period for determining priorities of the subscriber data, a reservation period for making a reservation for time slots for use in transmission of the subscriber data, and an assignment period for assigning a memory period according to an amount of the subscriber data, which periods are selectively and respectively included in the one portion of the data frame and in the other portion of the data frame, and (3) providing the data frame according to the transmission type and transmitting to the base station.